> > > > > > > < < < < < < <

THE
PLOTTER

```
  CLACKAMAS
  COMPUTER
  APPLIED
  TRAINING
  SOCIETY

COMPUTING THE FUTURE--
   IN CLACKAMAS COUNTY
```
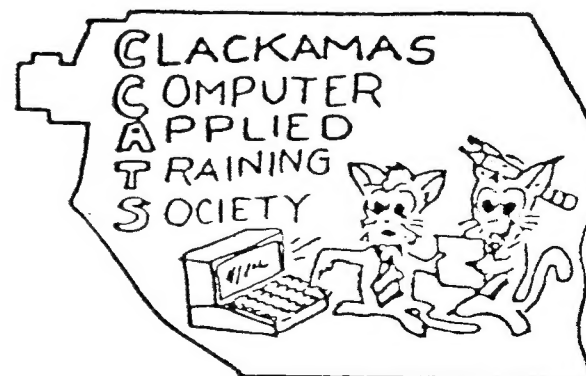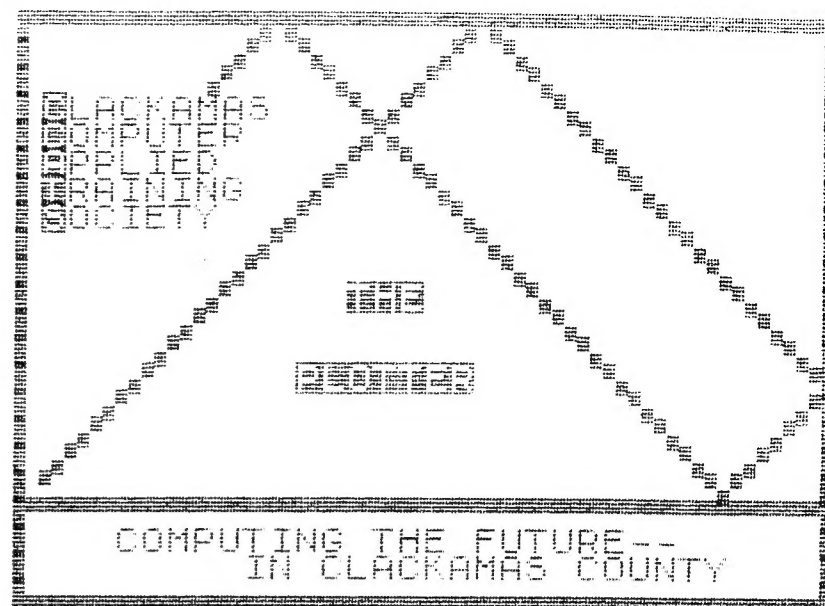
MEETING

The JULY meeting will be:

on: SUN., JULY 18 1993

MEETING   open at: 1:00 P.M.
in: COMMUNITY ROOM
    FAR WEST FEDERAL BANK
    OREGON CITY SHOPPING CENTER

WHAT YOU WILL FIND IN THIS ISSUE:

FROM THE EDITOR'S DESK

A recent acquisition to my MSDOS disk library is a program called Super Word Processor. The ad for it proclaimed that it is equal to WordPerfect. Well, many commands are similar. Maybe if I purchased the latest issue along with the manual I would find out more about it.

The manual on disk is sufficient to explain the commands but gives nothing on actually helping to use the program. This system gives the user an opportunity to discover "how to do it".

Right off, how do I change the margins of the text? The action is different from MSCRIPT which uses strings for line length while this program uses end of line code. The command for making the margins is OK but what about making the actual lines change? Well, that was solved by accident and I was able to repeat the action. I also found that cent- ering headings changed with the margins--very nice.

>> >>

```
  CLACKAMAS
  COMPUTER
  APPLIED
  TRAINING
  SOCIETY
```

On reading further in THE PLOTTER, the reader will find that RMG Enterprises is now organized and back orders are being filled. Actually, Rod and family have worked hard to set up a storage within their new home plus an office that he can work in. It is much better than his previous facility.

I was able to obtain a CAD drawing from my son who operates a machine shop. This is in the PC Page part of the news letter. Being a shop that will make from 1 to thousands of items there are times that the only drawing is a pencil sketch, or maybe an item that the customer brings in to be duplicated. The CAD program works just fine for making a shop drawing. Or maybe a part on a large drawing of parts will require duplicating for sending into the shop, with special notations for the machinist. Some of the machines in this shop are computer controlled. It is always interesting to go thru his shop and see what is being produced.

We recently heard that THE HACKER newsletter from Los Vegas is now back in circulation. We hope this information is correct as we always enjoyed this publication.

2868 SCREEN DUMP

Some time ago we received a letter from Paul Hill, Secretary of SINCUS, in which he included this screen dump program by Dave Schoenwetter. It is nice to have a program that can be changed to try different effects in printer output. Line 140 first resets the printer (27,64), then sets up the printer code for line spacing (27,51,22 to 25). Line 150 sets the density for 60 pixels per inch. Try different values of line spacing to print a true circle.

```
  5 REM screen dump program for
2068
 10 POKE 26703,0: POKE 23704,91
 20 RESTORE 100
 25 FOR F=23296 TO 23423: READ
A: POKE F,A: NEXT F
 30 STOP
100 DATA 254,1,40,1,201,0,0,0
102 DATA 17,112,91,6,8,26,79
104 DATA 205,96,91,19,16,248,33
106 DATA 0,64,17,120,91,6,8,26
108 DATA 79,205,96,91,19,16,248
110 DATA 6,32,22,128,14,0,30
112 DATA 128,126,162,40,3,123
114 DATA 177,79,36,203,59,48
116 DATA 244,205,96,91,37,37,37
118 DATA 37,37,37,37,37,203,58
120 DATA 48,225,44,16,220,14,13
122 DATA 205,96,91,175,181,32
124 DATA 196,62,8,132,103,254
126 DATA 88,56,188,201,0,0,0
128 DATA 219,127,230,16,32,250
130 DATA 121,211,127,0,219,127
132 DATA 0,0,0,201
140 DATA 7,7,27,64,27,51,25,7
150 DATA 0,0,0,0,27,75,0,1
220 REM LINE 150 is the printer
graphic code
230 REM LINES 140 and 150 are s
et for the Epson and Panasonic p
rinters. Printer mustbe configur
ed for carriage return only. Lin
e feed is not required.
240 REM LINE spacing set at 25/
216 of an inch. This is a tradeo
ff setting to allow circles to b
e round, and complete graphics c
overage for the screen copy.
250 REM LINE 2315 in Artworx mu
st be alstered to:"2315 IF M=VAL
"1190 THEN LPRINT CHR$ 1":GO TO
O TO MENU
260 REM Use LPRINT CHR$ 1 to co
py screen with this program.
270 REM Dave Schoenwetter, 1335
Farm to Market Rd., Endwell, NY
13760
```

SCREEN$ LOADER PROGRAM

Dick Wagner

A few years ago one of our subscriber, Dottie Bundy of Ventura, CA provided some graphic screen$ she had developed. Many have been used in back issues of THE PLOTTER. I don't find that we have published her "LOADER" program that makes it easy to select any one of 12 screen$ she has assembled into a catalog.

Dottie has made the list of screen$ and calls this a catalog which is handy to display the names of that group of illustrations just by typing in "CATALOG" SCREEN$. Just SAVE the second screen as a SCREEN$.

The original program was set up for another operating system (LKDOS?) but I changed it to the Oliger system. It is easy to pick out the LOAD lines and make appropriate changes to meet your system needs.

```
  5 CLS
 10 PRINT AT 9,8;"SCREEN PROGRA
MS"
 15 PRINT AT 11,15;"by"
 20 PRINT AT 13,9;"DOTTIE  BUND
Y"
 30 PRINT AT 14,7;"189 Stadium
Ave."
 40 PRINT AT 15,7;"Ventura, CA
93003"
 50 PAUSE 200: CLS
100 PRINT "SELECT SCREEN TO BE
VIEWED"
110 PRINT AT 2,0;" 1. HOLIDAYS"
;AT 3,0;" 2. SANTASPECS";AT 4,0;
" 3. ANGEL";AT 5,0;" 4. SANTA";A
T 6,0;" 5. FIREPLACE"
120 PRINT AT 7,0;" 6. SANTAHEAD
";AT 8,0;" 7. CANDYCANE";AT 9,0;
" 8. CANDLE";AT 10,0;" 9. PACKAG
E"
130 PRINT AT 11,0;"10. HORSE";A
T 12,0;"11. ALLERGIC";AT 13,0;"1
2. PIANO"
140 PRINT : PRINT "KEY IN SCREE
N$ NUMBER ": INPUT N
151 IF N=1 THEN GO TO 8001
152 IF N=2 THEN GO TO 8002
153 IF N=3 THEN GO TO 8003
154 IF N=4 THEN GO TO 8004
155 IF N=5 THEN GO TO 8005
156 IF N=6 THEN GO TO 8006
157 IF N=7 THEN GO TO 8007
158 IF N=8 THEN GO TO 8008
159 IF N=9 THEN GO TO 8009
160 IF N=10 THEN GO TO 8010
161 IF N=11 THEN GO TO 8011
162 IF N=12 THEN GO TO 8012
8001 LOAD /"HOLIDAYS"SCREEN$ : S
TOP
8002 LOAD /"SANTASPECS"SCREEN$ :
 STOP
8003 LOAD /"ANGEL"SCREEN$ : STOP
8004 LOAD /"SANTA"SCREEN$ : STOP
8005 LOAD /"FIREPLACE"SCREEN$ :
STOP
8006 LOAD /"SANTAHEAD"SCREEN$ :
STOP
8007 LOAD /"CANDYCANE"SCREEN$ :
STOP
8008 LOAD /"CANDLE"SCREEN$ : STO
P
8009 LOAD /"PACKAGE"SCREEN$ : ST
OP
8010 LOAD /"HORSE"SCREEN$ : STOP
8011 LOAD /"ALLERGIC"SCREEN$ : S
TOP
8012 LOAD /"PIANO"SCREEN$ : STOP

8999 STOP
9000 SAVE /"LOADER" LINE 5
```

the plotter
pc page
by: Rod Gowen

sorry! If you were expecting to continue on the OS/2 Odyssey, I will be disappointing you. I am waiting to receive my version 2.1 upgrade before I continue to explore the system.

In the meantime, I want to explore some problems that some of my customers come to me with. If you have little things that you cannot figure out about your IBM clone or software, why not ask me so I can research it and share the fixes with others?

Over the past few years several of my customers, all new to IBM clones and DOS have called me with the dreaded "OUT OF MEMORY" or "NOT ENOUGH MEMORY" or "INSUFFICIENT MEMORY TO RUN PROGRAM" report on their screen when they were sure that they had enough to hold the program in question. I have even had the problem myself and I have 20 Mbytes of RAM in my 386 system! My first job is to find out what is already using memory. REMEMBER!-EVEN IF YOU HAVE 20 MEGS, YOU STILL ONLY HAVE 640K OF PROGRAM SPACE! If your tax software wants 475K, as mine does, and you only have 350K available, you will get an error. To find out what is running and using RAM, you must use a utility such as MEM.EXE (comes with MS-DOS 5.0) or MAPMEM.COM (comes with TSRCOM, a shareware package) to look at the memory map on your computer. This will tell you how much memory is being used, by what and how much is available.

I had a call from a fellow last week who has a 486 with 4 Megs of RAM who was getting the out of memory error on virtually every program that was on his system. These had all been installed and had been running fine until this particular day. Upon running a memory check with MEM /C, we found that there was only 47K of memory being used but that the largest available space was only 365K! Where was the missing 228K? Having run into this on my own system from time to time, I asked him to power down (turn off) his computer and wait 15-20 seconds for the hard drive to come to a complete stop and then re-start the system. After the re-start, all was back to normal and he again had over 600K of available work space.

I honestly cannot tell you where that memory was, but I can tell you that, from the days of the TS2068 on, I have run into things that seem to "hang-up" in memory and the only way to clear it out is to kill all power to the RAM. I am sure that it has something to do with the way that various programs use memory and that some of them refuse to release it when they are done with it. With all of the software that DOS and Windows users are now using, is it any wonder that we run into both hardware and software conflicts on an almost daily basis?

I am always up for a good mystery when it comes to why something does r work the way it should on a computer. As I said before, if any of you ru into something unusual while you are computing, let us know. You may not l the only one having the trouble, and who knows, maybe we can shed some light on the problem for you.

See you next time with more from my PC. . .

Keep watchin'!

PC CAD
Dick F. Wagner

CAD programs permit sophisticated drawing (drafting) with a computer. CAD stands for Computer Aided Drawing. There are a few such programs on the market, some being expensive for the ordinary user ($2000-$3000) while there are a few for under $100. Turbo CAD is usually found in the lower price range while probably the lowest (outside of share ware) is KeyCAD by Softkey, at under $40.00.

To illustrate a drawing made with TurboCAD, this example by Kiwanda Machine Works of Clackamas, OR is a cut-away view of a special valve. The plunger stem has a hole for a fitting. The hex head end is drilled and tapped for a tube fitting. The valve seat and valve disc are shown at about 45 degrees while a valve seal is shown in black. I believe this drawing may be either twice size or full size. Of the 4 parts shown Kiwanda machined the valve body and valve stem. This drawing was made from the drawings of each part.
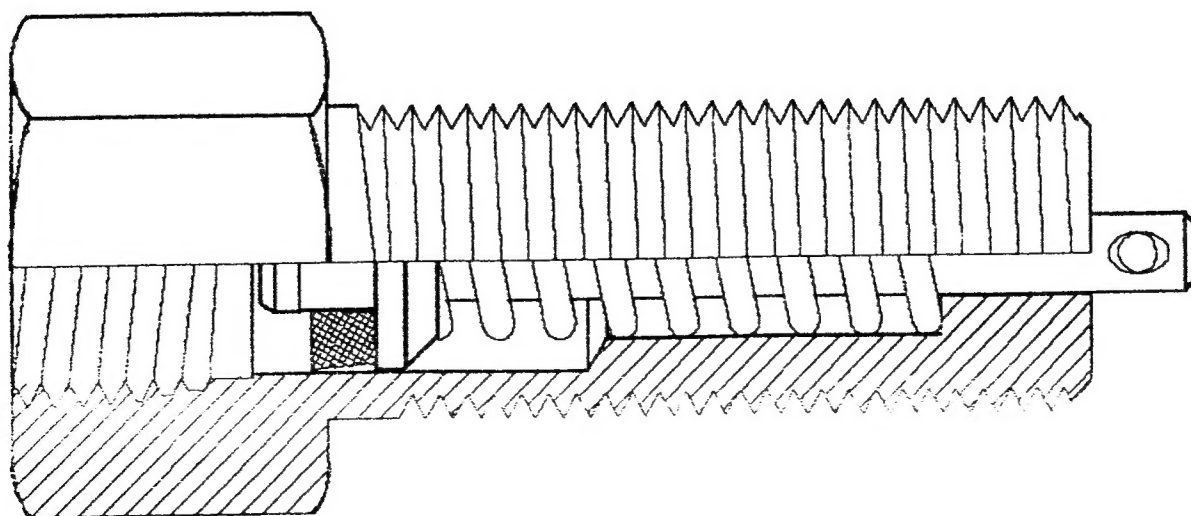
THE ELUSIVE SERIAL PORT STANDARD
Dick F. Wagner

Since "advancing" to an AT IBM clone computer, I have been unable to use several devices from XT days that made use of the serial port. Quite confusing as these devices worked before. SO, there must be a difference in computer operation, or in the serial port configuration. The configuration of the ports was the likely problem as the XT uses a 25 pin connector while the AT uses a 9 pin connector. As it turns out, there is a considerable difference in number duplication, in fact there is only one pin number duplicated.

Some reading up on nomenclature, mnonicics, and how the various pins are used, gave me an idea of how an adapter cable could be made that would change the 9 pin to a 25 pin connector properly oriented to the XT configuration. The following is the proper configuration.

25 pin XT		9 pin AT
1	NOT USED	
2	TxD	3
3	RxD	2
4	RTS	7
5	CTS	8
6	DSR	6
7	Sig. GND	5
8	CD	1
20	DTR	4
22	RI	9

This is a list of the mnomics and meanings--

TxD	Receive Data
RxD	Transmit Data
RTS	Request to Send
CTS	Clear to Send
DSR	Data Set Ready
Sig. GND	Signal Ground
CD	Carrier Detect
DTR	Data Terminal Ready
RI	Ring Indicate

The main confusion here is the use of pins 2 and 3. From the RS 232 standard it seems that pin 2 is taken to be TxD while pin 3 is RxD. Note that the AT connector is the reverse of this. Well, I made my cable with like uses connecting and this seems to work. If it becomes necessary to switch pins this is done with a cable switching adapter.

Switching pins becomes necessary when the computer transmitting must be connected to the receiving computer TxD pin so when both computers are transmitters and both are receivers these pins must be cross connected.

I have a Kraft mouse with a special 9 pin-25 pin connector. This made an ideal test facility. A reader who may wonder about the mouse pins, here they are--

25 pin		9 pin
2	TxD	3
3	RxD	2
4	RTS	7
7	Gnd.	5
20	DTR	4

A word of warning--the pins on a connector are usually numbered on the insulating material around the pins. These numbers are very small and require a magnifying glass to read them. Make connections by number and not pin position as one cannot tell if a drawing is from the back side or the front side unless it is labeled. Remember that pin positions are reversed for opposite sex.

RMG UPDATE NEWS FOR JULY 1993

VOLUME 5 NUMBER 7

We would like to hear from you! If you have something that you think we or our readers would be interested in hearing about, please call or write! We will pass it on!

** RMG NEWS **

Well, we are finally moved and are starting to get settled into our new location. We are frantically trying to locate all of our inventory items, take a count and start filling orders as soon as we can. Some of you should see your orders arriving very soon if they have not already done so. Those who have not heard from RMG regarding a letter, request or order that you mailed after the first of April, please do not dispair, we will get to it soon!

Some of you may have noticed by now, this little newsletter is now going to be carried as a regular feature in THE PLOTTER to replace the long-running BITS & BYTES column that I have been writing for many years. It makes more sense, as I was writing this news page and then virtually retyping it into the BITS & BYTES format anyway. Let us know what you think. We are not after free advertising, but we can use the exposure.

Did you get last month's mailing? If not, or, if you are new to RMG UPDATE NEWS, please make sure that you have the following new addresses in your records:

RMG ENTERPRISES
14784 SOUTH QUAIL GROVE CIRCLE
OREGON CITY, OR 97045   TELEPHONE HOURS: 8AM-6PM PT TUE-SAT

CCATS
14784 SOUTH QUAIL GROVE CIRCLE
OREGON CITY, OR 97045

*** BEST OF THE PLOTTER NEWS ***

We are still working! It is a slow process and we only have a very few people working on the project and these only for a couple of hours per month. Almost all of the section pages are completed and we are looking forward to getting into the assembly process soon. At that point, we will be getting close to finishing and we certainly hope that this happens before year's end!

KEEP WATCHIN' FOR MORE NEWS! Rod Gowen, Owner, RMG Enterprises
14784 South Quail Grove Circle, Oregon City, OR 97045
503/655-7484 8AM-6PM PT * FAX: 503/655-4116 24 HRS

✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠✠

—NOTICE—

SUBSCRIPTION RATES

FREE SUBSCRIPTION WITH PAID CCATS MEMBERSHIP-$20.00/YR

PLACE YOUR AD HERE

AD RATES
****
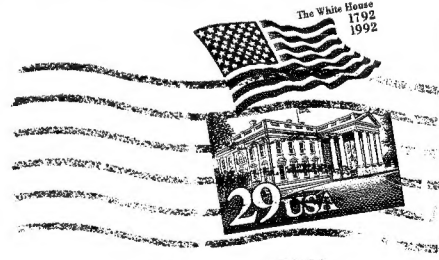*1 FOUR LINE CLASSIFIED FREE WITH MEMBERSHIP*

$ .50 / LINE
$ 5.00 / 1/4 PAGE
$ 8.00 / 1/2 PAGE
$ 15.00 / FULL PAGE

ALL AD COPY MUST BE IN BY THE 10TH OF THE MONTH PRIOR TO THE MONTH AD IS TO RUN.

CCATS

14784 S. Quail Grove Circle
Oregon City, OR 97045

PORTLAND, OR 972
PM
1993

29 USA
The White House
1792
1992

(place label here)

07801-2205 07